ACKNOWLEDGEMENTS

The senior author wishes to express his appreciation to Dr. Reed C. Rollins, Dr. R. K. Godfrey, Dr. Carroll E. Wood, Jr. and Mr. George Argus for their interest and helpful criticisms. — DEPARTMENT OF BIOLOGICAL SCIENCES, FLORIDA STATE UNIVERSITY, TALLAHASSEE, FLORIDA, AND THE ROYAL BOTANIC GARDENS, KEW, ENGLAND.

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# CHROMOSOME NUMBERS OF SOME BRAZILIAN LEGUMINOSAE[1]

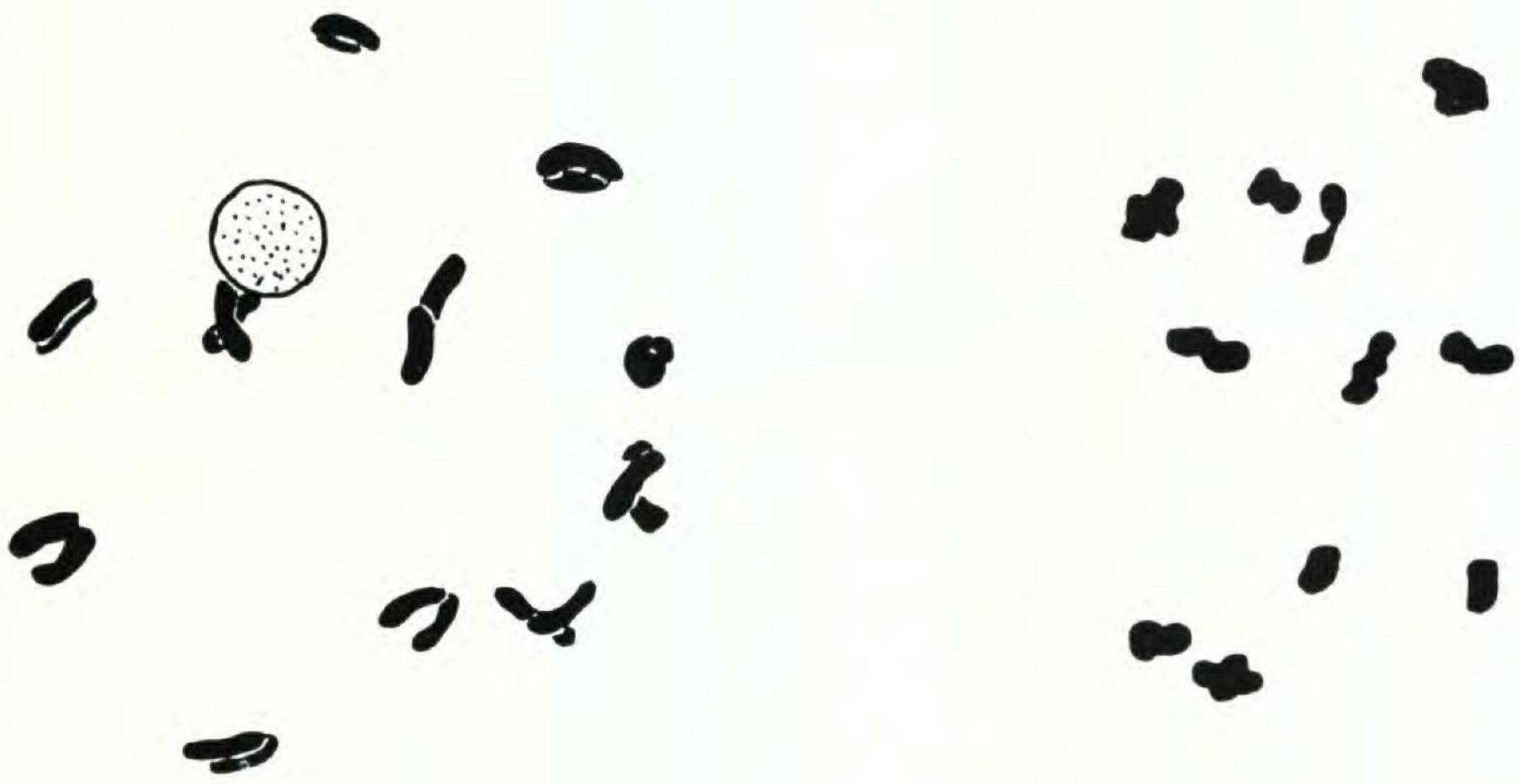
B. L. TURNER AND H. S. IRWIN

The junior author of this paper spent 5 months during 1958-59 in south-central Brazil collecting *Cassia* material in connection with a doctoral thesis problem. Since he was routinely collecting bud material of various species of this genus and shipping these air mail to the senior author for meiotic examination, he was able to include, as time and opportunity permitted, occasional bud collections of other

[1]This study was supported in part from funds provided by The University Research Institute of The University of Texas. We are indebted to Dr. Richard S. Cowan of the Smithsonian Institution for the identification of the specimens.

taxa of the family Leguminosae. The present contribution summarizes the results of a study of this latter material.

Chromosome counts were made by the squash technique essentially as outlined by Turner (1956). Voucher specimens are deposited at The University of Texas Herbarium, the United States National Herbarium and elsewhere.



FIGURES 1-4. Camera lucida drawings of meiotic figures. FIG. 1. *Camptosema tomentosum* ($n = 11$). FIG. 2. *Centrosema coriaceum* ($n = 11$). FIG. 3. *Galactia martii* $n = 10$). FIG. 4. *Periandra mediterranea* var. *mucronata* ($n = 11$). All figures x ca. 2000.

TABLE 1. SPECIES OF BRAZILIAN LEGUMINOSAE EXAMINED FOR CHROMOSOME NUMBERS.

| Species | Voucher collection | n number |
|---|---|---|
| CAESALPINIOIDEAE | | |
| *Bauhinia* aff. *mollis* (Bong.) Walp. | GOIAS: *Irwin 2584.* | $n = 14$ |
| *Bauhinia rufa* Steud. | MINAS GERAIS: *Irwin 2395.* | $n = 14$ |
| *Caesalpinia ferrea* Mart. | MINAS GERAIS: *Irwin 2368.* | $n = 12$ |
| *Caesalpinia spinosa* (Molina) Ktze. | MINAS GERAIS: *Irwin 2329.* | $n = 12$ |
| *Caesalpinia* sp. | MINAS GERAIS: *Irwin 2331.* | $n = 12$ |
| *Copaifera langsdorffii* Desf. | MINAS GERAIS: *Irwin 2394.* | $n = 12$ |
| PAPILIONOIDEAE | | |
| *Aeschynomene elegans* S. & C. | MINAS GERAIS: *Irwin 2081.* | $n = 10$ |
| *Camptosema tomentosum* Benth. | MINAS GERAIS: *Irwin 2481.* | $n = 11$ (Fig. 1) |
| *Centrosema coriaceum* Benth. | MINAS GERAIS: *Irwin 2503.* | $n = 11$ |
| *Centrosema coriaceum* Benth. | MINAS GERAIS: *Irwin 2366.* | $n = 11$ (Fig. 2) |
| *Crotalaria stipularia* Desv. | MINAS GERAIS: *Irwin 2006.* | $n = 16$ |
| *Crotalaria striata* Schrank | MINAS GERAIS: *Irwin 2018.* | $2n = 16$ |
| *Crotalaria* sp. | MINAS GERAIS: *Irwin 2463.* | $n = 8$ |
| *Galactia martii* DC. | MINAS GERAIS: *Irwin 2406.* | $n = 10$ (Fig. 3) |
| *Galactia martii* DC. | MINAS GERAIS: *Irwin 2506.* | .. $n = 10$ |
| *Indigofera* cf. *truxillensis* H.B.K. | MINAS GERAIS: *Irwin 2176.* | $n = 8$ |
| *Periandra mediterranea* (Vell.) Taub. | MINAS GERAIS: *Irwin 2504.* | $n = 11$ |
| *Periandra mediterranea* var. *mucronata* (Benth.) Burk. | MINAS GERAIS: *Irwin 2393.* | $n = 11$ (Fig. 4) |

CAESALPINIOIDEAE — Chromosome counts for species in the genus *Bauhinia* ($n = 14$) and *Caesalpinia* ($n = 12$) are consistent with reports for other species in these taxa (Darlington and Wylie, 1956). Including the present (Table 1), only 3 species of *Copaifera* have counts reported for them, 2 from South America and one from Africa (Mangenot and Mangenot, 1957). All were diploid with $n = 12$.

PAPILIONOIDEAE — Chromosome counts for species of *Aeschynomene* ($n = 10$), *Crotalaria* ($n = 8$), *Galactia* ($n = 10$) and *Indigofera* ($n = 8$) are consistent with the basic numbers already established for these genera. The chromosome number of *Centrosema coriaceum* ($n = 11$; fig. 2) dif-

fers from that of the other three species of the genus reported. All of the latter are diploid with $n = 10$ (Frahm-Leliveld, 1957).

Chromosome counts for taxa of *Camptosema* ($n = 11$) and *Periandra* ($n = 11$) are first reports for these genera.

SUMMARY

Chromosome counts for 17 taxa of Brazilian Leguminosae are reported, these include first reports for 15 species and two genera (*Periandra*, $x = 11$, and *Camptosema*, $x = 11$). *Centrosema coriaceum* ($n = 11$) was found to have a different basic number than has been previously reported for the genus. — BOTANY DEPARTMENT AND THE PLANT RESEARCH INSTITUTE, UNIVERSITY OF TEXAS, AUSTIN.

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# A DECADE OF BOTANIZING IN ILLINOIS

ROBERT H. MOHLENBROCK

The publication of Flora of Illinois, Second Edition (Jones, 1950) brought up to date the vascular plants known to occur in the state and at the same time fortunately paved the way for intensive botanizing throughout the state. As documentation for this renewed research on the Illinois flora, no less than eighty publications have appeared since 1950, many of them recording species previously unreported from Illinois. Efforts have been concentrated throughout the state — in the Chicago region by Steyermark, Swink, and Thieret, in the northwestern section by E. W. Fell, in the east central area by Jones and Ahles, in the west central section by V. Chase, Dobbs, Rexroat, and Winterringer, and in southern Illinois by Voigt and the writer. In addition, Evers has collected extensively throughout the state.